

AMENDMENT NO. 1 AUGUST 2022

TO

IS 9833 : 2018 LIST OF COLOURANTS FOR USE IN PLASTICS IN CONTACT WITH FOODSTUFFS AND PHARMACEUTICALS (Second Revision)

(Second cover page, Foreword, para 6) — Insert the following new para after para 6:

'The provisions of this standard shall apply to colourants like pigments and dyes, used for colouring plastic materials and articles, varnishes and coatings placed or intended to be placed into contact with foodstuffs, food products and drinks. They shall not apply to inks for printing on materials and articles intended to come into contact with foodstuffs where a functional or absolute barrier is involved.'

(Page 1, clause 2) — Insert the following new references at an appropriate place:

IS No.	Title
1070 : 1992	Reagent grade water (third revision)

(Page 1, clause 3.1, Note 1) — Insert the following at the end of Note:

“The term ‘colourants’ include substances as well optical brighteners and fluorescent whiteners, which may not be themselves be coloured, but whose use is intended to affect the colour of a food contact material.”

(Page 2, Table 1) — Substitute the following table for the existing table:

Table 1 Requirements for Colourants
(Clause 4.3)

Sl No. (1)	Characteristic (2)	Requirement (3)	Method of Test, Ref to	
			IS No. (4)	Annex of this Standard (5)
i)	Lead, percent by mass, <i>Max</i>	0.01	—	G
ii)	Arsenic, percent by mass, <i>Max</i>	0.005	—	G
iii)	Mercury, percent by mass, <i>Max</i>	0.005	—	G
iv)	Cadmium, percent by mass, <i>Max</i>	0.010	—	G
v)	Zinc, percent by mass, <i>Max</i>	0.05	—	G
vi)	Selenium, percent by mass, <i>Max</i>	0.01	IS 3025 (Part 56)/ IS 15303	—
vii)	Barium, percent by mass, <i>Max</i>	0.01	—	G
viii)	Chromium, percent by mass, <i>Max</i>	0.025	—	G
ix)	Antimony, percent by mass, <i>Max</i>	0.025	—	G
x)	Total primary aromatic amines, percent by mass, <i>Max</i> (calculated as Aniline equivalent)	0.05	IS 14816 or	B

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Table 1 (Concluded)

xi)	Sulphonated aromatic amine, percent by mass, <i>Max</i> (calculated as aniline sulphonic acid)	0.05	IS 14816 or	B
xii)	Polychlorinated biphenyl, <i>Max</i> (mg/kg) reported as decachloro biphenyl	25	Annex M of IS 13428 or	C
xiii)	Carcinogenic amine listed in Annex A, <i>Max</i> (mg/kg)	10	IS 14816	—

(Page 2, clause 4.4, line 4) — Substitute ‘0.1 AU’ for ‘0.01 AU’.

(Page 14, Annex F) — Insert following new ‘Annex G’ at the end:

ANNEX G

DETERMINATION OF IMPURITIES FOR COLOURANTS

(Table 1)

G-1 PRINCIPLE

Soluble elements are extracted from colourants using conditions which simulate the material remaining contact with gastric juices for a period of time.

G-2 REAGENT

G- 2.1 Hydrochloric Acid Solution — 0. 1 (M), analytical grade

G- 2.2 Distilled Water, see IS 1070.

G- 3 APPARATUS

G-3.1 Standard Glass Cylinder, of 50 ml capacity.

G- 3.2 Mechanical Agitator

G- 3.3 Weighing Balance, 0.01 g.

G- 3.4 Membrane Filters, with pore sizes of 0.45, 0.22 and 0.02 micron.

G- 4 EXTRACTION PROCEDURE

10 g of the colorant is kept in suspension in 150 ml 0.1 M HCL under $23 \pm 2^{\circ}\text{C}$. A mechanical agitator to be used to speed up the extraction process. Stop the agitation after 15 min. Cover the container and protect it from light. Post agitation, the solution to be kept standing or 15 min for sedimentation of the colourant. The solids from the solution to be separated firstly by decantation followed by filtration using a membrane filter.

G- 5 INSTRUMENTAL ANALYSIS

The filtrate from **G-4** is to be then analyzed for elements using standard methods like ICP – MS, ICP-OES.’

(PCD 12)